

## CLAIMS LISTING

1. (currently amended) A stimulable phosphor screen or panel suitable for use in mammographic applications comprising a binderless phosphor layer having needle-shaped crystals, said layer not exceeding a layer thickness of 150  $\mu$ m, and a support ~~characterized in that~~ wherein an intermediate layer arrangement of an X-ray absorbing foil or layer absorbing x-rays to a lower extent, and avoiding scattering to a great extent, and, farther from the support, a stimulated light reflecting foil is present between said support and said phosphor layer.
2. (previously presented) A stimulable phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement comprises an X-ray absorbing layer comprising a binder wherein said binder is a matrix of a polycondensation product of a metal alkoxide species, and an oxide or a hydroxide of lead metal is dispersed in said binder.
3. (original) A stimulable phosphor screen or panel according to claim 2, wherein said binder containing the lead compound is a matrix of an inorganic network of alkoxymetal substituted organic polymers or copolymers matrix.

4.(original) A stimuable phosphor screen or panel according to claim 3, wherein said matrix is derived from a cross-linking agent selected from the group consisting of dialkoxysilanes, trialkoxysilanes, tetraalkoxysilanes, titanates, zirconates and aluminates; and a colloid of silica, and wherein said matrix comprises a colloid of an oxide or a hydroxide of lead metal.

5.(original) A stimuable phosphor screen or panel according to claim 1, wherein said intermediate layer arrangement comprises, as an X-ray absorbing layer a layer of lead.

6.(original) A stimuable phosphor screen or panel according to claim 1, wherein as a stimulated light reflecting foil an aluminum layer is present.

7.(original) A stimuable phosphor screen or panel according to claim 2, wherein as a stimulated light reflecting foil an aluminum layer is present.

8.(cancelled)

9.(cancelled)

10.(cancelled)

11.(original) A phosphor screen or panel according to claim 1, wherein said support is selected from the group consisting of ceramics, glass, amorphous carbon, aluminum and polymeric films.

- 12.(original) A phosphor screen or panel according to claim 6,  
wherein said support is selected from the group consisting  
of ceramics, glass, amorphous carbon, aluminum and  
polymeric films.
- 13.(original) A phosphor screen or panel according to claim 1,  
wherein said intermediate layer arrangement has a surface  
that has been subjected to embossing for forming a fine  
concavo-convex pattern.
- 14.(original) A phosphor screen or panel according to claim 6,  
wherein said intermediate layer arrangement has a surface  
that has been subjected to embossing for forming a fine  
concavo-convex pattern.
- 15.(cancelled)
- 16.(cancelled)
- 17.(original) A phosphor screen or panel according to claim 1,  
having between said intermediate layer arrangement and the  
support a moisture-repellent parylene layer.
- 18.(original) A phosphor screen or panel according to claim 6,  
having between said intermediate layer arrangement and the  
support a moisture-repellent parylene layer.
- 19.(cancelled)
- 20.(cancelled)

- 21.(original) A phosphor screen or panel according to claim 1,  
having between said intermediate layer arrangement and the  
phosphor layer a moisture-repellent parylene layer.
- 22.(original) A phosphor screen or panel according to claim 6,  
having between said intermediate layer arrangement and the  
phosphor layer a moisture-repellent parylene layer.
- 23.(cancelled)
- 24.(cancelled)
- 25.(original) A phosphor screen or panel according to claim 1,  
having between said intermediate layer arrangement and the  
phosphor layer and between said intermediate layer  
arrangement and the support a moisture-repellent parylene  
layer.
- 26.(original) A phosphor screen or panel according to claim 6,  
having between said intermediate layer arrangement and the  
phosphor layer and between said intermediate layer  
arrangement and the support a moisture-repellent parylene  
layer.
- 27.(cancelled)
- 28.(cancelled)
- 29.(cancelled)
- 30.(cancelled)
- 31.(cancelled)

32. (cancelled)

33. (cancelled)

34. (currently amended) A binderless stimuable phosphor screen or panel according to ~~claim 30~~ claim 1, wherein said needle-shaped phosphor crystals are crystals of an alkali metal halide phosphor.

35. (currently amended) A binderless stimuable phosphor screen or panel according to ~~claim 31~~ claim 2, wherein said needle-shaped phosphor crystals are crystals of an alkali metal halide phosphor.

36. (cancelled)

37. (currently amended) A binderless stimuable phosphor screen according to ~~claim 29~~ claim 34, wherein said alkali metal halide phosphor is a CsX:Eu stimuable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

38. (currently amended) A binderless stimuable phosphor screen according to ~~claim 30~~ claim 35, wherein said alkali metal halide phosphor is a CsX:Eu stimuable phosphor, wherein X represents a halide selected from the group consisting of Br, Cl and I.

39. (cancelled)

40. (cancelled)

41. (cancelled)
42. (cancelled)
43. (cancelled)
44. (cancelled)
45. (new) A phosphor screen or panel according to claim 1,  
wherein said x-ray absorbing foil or layer has a thickness  
in the range of 25 to 150  $\mu\text{m}$ .
46. (new) A phosphor screen or panel according to claim 2,  
wherein said said x-ray absorbing foil or layer has a  
thickness in the range of 25 to 150  $\mu\text{m}$ .
47. (new) A phosphor screen or panel according to claim 5,  
wherein said said x-ray absorbing foil or layer has a  
thickness in the range of 25 to 150  $\mu\text{m}$ .
48. (new) A phosphor screen or panel according to claim 6,  
wherein said aluminum layer has a thickness in the range of  
0.5  $\mu\text{m}$  to 5  $\mu\text{m}$ .
49. (new) A phosphor screen or panel according to claim 7,  
wherein said aluminum layer has a thickness in the range of  
0.5  $\mu\text{m}$  to 5  $\mu\text{m}$ .
50. (new) A phosphor screen or panel according to claim 1,  
wherein said support is a PET support having a thickness in  
the range from 100  $\mu\text{m}$  to 1000  $\mu\text{m}$ .

- 51.(new) A phosphor screen or panel according to claim 2,  
wherein said support is a PET support having a thickness in  
the range from 100  $\mu\text{m}$  to 1000  $\mu\text{m}$ .
- 52.(new) A phosphor screen or panel according to claim 5,  
wherein said support is a PET support having a thickness in  
the range from 100  $\mu\text{m}$  to 1000  $\mu\text{m}$ .
- 53.(new) A phosphor screen or panel according to claim 6,  
wherein said support is a PET support having a thickness in  
the range from 100  $\mu\text{m}$  to 1000  $\mu\text{m}$ .
- 54.(new) A phosphor screen or panel according to claim 7,  
wherein said support is a PET support having a thickness in  
the range from 100  $\mu\text{m}$  to 1000  $\mu\text{m}$ .
- 55.(new) A phosphor screen or panel according to claim 1,  
wherein said support is an amorphous carbon support having  
a thickness in the range from 100  $\mu\text{m}$  to 3000  $\mu\text{m}$ .
- 56.(new) A phosphor screen or panel according to claim 2,  
wherein said support is an amorphous carbon support having  
a thickness in the range from 100  $\mu\text{m}$  to 3000  $\mu\text{m}$ .
- 57.(new) A phosphor screen or panel according to claim 5,  
wherein said support is an amorphous carbon support having  
a thickness in the range from 100  $\mu\text{m}$  to 3000  $\mu\text{m}$ .

58.(new) A phosphor screen or panel according to claim 6,  
wherein said support is an amorphous carbon support having  
a thickness in the range from 100  $\mu\text{m}$  to 3000  $\mu\text{m}$ .

59.(new) A phosphor screen or panel according to claim 7,  
wherein said support is an amorphous carbon support having  
a thickness in the range from 100  $\mu\text{m}$  to 3000  $\mu\text{m}$ .